



CONSTELLATION

A publication of the
U.S. Army Corps of Engineers, Baltimore District
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A Unique Mission:

*How the
Washington
Aqueduct
provides drinking
water to residents in
and around the
nation's capital*

Story and photos by
Chanel S. Weaver
Public Affairs Office

Sixteen years ago, Donald Rose, an engineering equipment operator for Baltimore District, had no idea what went into producing a quality glass of drinking water.

"I would just turn on the faucet, drink the water, and not give it a second thought," said Rose.

But today, after spending more than 15 years observing how water from the Potomac River is transformed into drinking water for the residents in and



Mel Tesema, section chief of the Operations Branch at the Washington Aqueduct, monitors a turbidimeter. The machine is used to measure the clarity of water that is treated at the Aqueduct.

around the District of Columbia, Rose has a new appreciation for his drinking water.

"When I turn on the faucet now, I remember that it took the hard work of many people to deliver that water to my house," Rose said.

Rose is just one of nearly 200 employees who work at the Washington Aqueduct, a division of the Baltimore District, and a federally-owned and operated public water supply agency that produces an average of 180 million gallons of water per day for residents in the D.C. metropolitan area.

The Aqueduct has two treatment plants located in Washington, D.C. The

Dalecarlia Reservoir and Treatment Plant, which is located near the Potomac River on MacArthur Boulevard several miles upstream of Georgetown, delivers drinking water to the western portion of the District of Columbia, Arlington County, Va., and Falls Church, Va.

The McMillan Reservoir and Treatment Plant, which has been in operation since 1905, is located near Howard University and the Children's Hospital, and delivers much of its drinking water to the eastern portion of the District of Columbia.

(continued on page 6)

In
this
issue:

Hispanic Heritage Month Kicks Off



Page 5

Remembering Veterans Day



Page 8



U.S. Army Corps
of Engineers
Baltimore District

[http://
www.nab.usace.army.mil](http://www.nab.usace.army.mil)

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Commander's Comment

Do What's Right, Always Do Our Best

By Col. Peter W. Mueller
Commander and District Engineer

The Baltimore District has a large workforce and a tremendously diverse and important mission. We cannot successfully *Accomplish Our Mission* or properly *Care for Our People* without the dedicated efforts of every member of this great team. Our corporate success requires that each of us ***"Do What's Right, Always Do Our Best."*** This is the third key element of my command philosophy.

Doing What is Right is the basic responsibility of every employee. Just as every part in a combustion engine must operate properly for the motor to function efficiently and effectively, every

***"Doing the right thing
often means choosing
the hard right over the
easy wrong."***

member of our team must fulfill their responsibilities to ensure we function in a similar manner. Doing the right thing often means choosing the hard right over the easy wrong; it means exhibiting the Army Values every day. Doing the right thing means following established processes, being the honest broker and making decisions that we know in our hearts are correct. When leaders do the right thing and ensure our workers are trained, resourced and empowered, employees respond by making the right decisions and achieving or exceeding standards.

Always Doing Our Best means we put forth our utmost effort to accomplish our tasks. It means doing a self evaluation each day and questioning whether we personally served our co-workers and

customers to the best of our ability. No day is ever quite the same — some days we may have more energy, better health or less distractions — but overall we do the best we can under differing circumstances and strive not to let down those who depend on us.

In the three months I have been serving with you, I have seen great passion, pride and professionalism exhibited by our team. I have traveled extensively meeting local, state and federal officials, politicians, customers and Army leaders and have learned that the District reputation is that we do indeed ***"Do What's Right, Always Do Our Best."***

I see examples of this everywhere. Volunteers have done their best deploying to Iraq, Afghanistan and New Orleans to serve in difficult conditions. There were superb efforts during the annual budget closeout and in preparation for the audit by Price Waterhouse Cooper. The quality assurance and safety inspections at project sites set the right standards to ensure we build quality projects safely. The *Lockout-Tagout* procedures employed during maintenance operations at our field facilities are done the right way. Our regulatory teams set standards every day making the tough, correct calls often while under intense public scrutiny. The administrative and advisory staff do their best supporting each of our divisions, ensuring we do business the right way. Our design engineers do their best before they put their professional stamp on plans and specifications. Our project managers and planners do what's right, speaking candidly and honestly whenever they communicate with customers.

Each of you must be proud of your contributions and your impact on this District as we strive to meet the needs of our customers. Our daily actions establish the reputation of the Corps and the Army and it does not go unnoticed!

— Essayons

Shaping Leaders:

A personal reflection on the Emerging Leaders Conference

By Jude T. Harrington
Operations Division, Raystown Lake

John C. Maxwell once wrote “A leader is one who knows the way, goes the way and shows the way”. This past August I had the privilege of attending the Emerging Leaders Conference in San Diego, Calif. This three-day, high-energy conference, which precedes the Senior Leaders Conference, was a great opportunity to “learn the way”.

The primary focal points of the ELC are strength based leadership, developing vision statements, learning how to inspire motivation and outlining techniques for building strong team relationships. After a focused effort on identifying individual leadership strengths, the facilitators from Gallup University communicated the traits of effective leaders and provided examples of how to recognize leadership traits in other team members.

The ELC is a unique type of training because it provides emerging leaders the opportunity to participate in the SLC which follows the training. This format allows the emerging leaders to engage the senior leaders in conversations about practical issues and gain an understanding of how senior leaders make decisions.

Additionally, I was given the opportunity to interact with the top commanders of the Corps, including the Chief of Engineers, which provided me insight to their personalities and leadership styles. Observing these leaders in action

was not only an honor, but an experience that helped me focus on my leadership style.

I was most impressed that the senior leaders, under Lt. Gen. Carl A. Strock’s guidance, were focused on identifying the Corps’ operational and design weaknesses and then identifying action plans to correct them.

The 12 Actions for Change, which challenged the Corps to examine both its processes and institutional culture so it does not repeat the lessons learned from Hurricane Katrina, was a result of the senior leaders’ introspective analysis.

The emerging leader’s class of 2006 worked with the senior leaders to discuss implementation procedures for the 12 Actions for Change.

As a closing thought, I would like to share a story about the type of interaction that transpired within the emerging leader’s class. While discussing the Corps “Can Do” attitude one candidate expressed his disdain for the Corps’ motto, “Essayons.” He expressed that “Let Us

Try” is hardly a motto of a “Can Do” agency. After a day of reflection about the true meaning of “Essayons,” Terry Zien, St. Paul District, gave our class its definitive statement by writing the words in the graphic above.

I encourage all supervisors to identify and grow leaders on your teams. I highly recommend the ELC training and other leadership programs to anyone who demonstrates the leadership potential the Corps needs to serve the Army and the Nation in the future. I personally observed the Corps’ strong commitment to leadership development.

For more information about the ELC nomination process, visit www.hq.usace.army.mil/cehr/D/ELC/elchome.htm.



Meet Sgt. Maj. (Ret.) Steven Golder



Steven Golder raises his cup for a toast during a retirement ceremony in his honor Oct. 16. Golder retired from the Marine Corps Reserves last month after 27 years of service.

By Joyce M. Conant
Public Affairs Office

Steven Golder retired last month, but not from his job with the Baltimore District, where he has worked since 1983.

Instead, he retired from the Marine Corps Reserves after 27 years of military service.

Golder has spent lots of time on the road since 9/11. He deployed with 2nd Battalion, 25th Marines for one year after 9/11 in support of Operation Tempo Relief under 2nd Marine Division, Camp Lejeune, N.C. Then he deployed to Iraq in August 2004, had a deployment break, and was sent back for an additional seven months. He returned to his position as a supervisory survey technician in the

Navigation Branch in July 2006.

Golder left his son Steven Jr., 20, in charge of the home front while he was away.

"I think he got used to being in charge of the house while I was away," said Golder. "He moved downstairs to have privacy when I returned."

Golder said his most memorable and scary moment in Iraq was when his unit was first attacked by rockets.

"I was in the rack asleep and I could hear we were being rocketed," said Golder. "I could see black smoke with fire."

He said most of the time they were rocketed during the night while they were asleep.

Golder was stationed in Al Asad, Iraq, where most of the military's air support was located. His unit, based out of Norfolk, Va., is Marine Medium Helicopter Squadron 774 and they were jointly located with Army and Air Force personnel.

As the sergeant major, Golder was leading a group of more than 100 active-duty Soldiers and more than 100 reservists.

"It's uncommon for a Marine Reserve sergeant major to lead a group of active-duty and reserve Marines under one command," said Golder. He said the camaraderie between the two was great — they all were there to accomplish a single mission.

Golder expressed his pride in the dedication of his younger troops.

"My Soldiers dropped engines and transmissions within 24 hours to get the planes back up and flying," said Golder. He said they did this all the time while worrying about being hit by rockets.

Golder said what he missed most during his deployment to Iraq was the freedom to move around.

"We were secluded and couldn't go out," he said. "We had a PX (Post Exchange), but you might have to stand in line for two hours to get toothpaste."

Golder said deployees greatly appreciate gifts from home, especially during the upcoming holiday season.

"Holidays are a tough time to be away," said Golder.

He said that in addition to the normal gifts you would send, donating ornaments, lights and trees — both big and small — gives deployed Soldiers a sense of home and makes them feel better around the holidays.

District holds first Hispanic Heritage Observance

By Chanel S. Weaver
Public Affairs Office

More than 100 District employees gathered in the City Crescent Building Oct. 11, to join in the District's first formal observance of Hispanic Heritage Month.

The theme of the event was *"Hispanic Americans: Our Rich Culture Contributing to America's Future."*

The ceremony opened with remarks by Col. Peter W. Mueller, Baltimore District commander. Mueller said Hispanic Americans have made important contributions to the United States.

"Hispanic Americans have fought and died for our country in every war and conflict since our founding," he said.

Cecilia Simms, a representative from Sen. Paul Sarbanes' office, also made remarks during the ceremony and the City Crescent Building Voices of Harmony performed a musical selection.

The guest speaker for the event was Mauricio Barreiro, chairperson of both the Governor's Commission on Hispanic Affairs and the Baltimore County Human Relations Commission.

Barreiro invited the attendees to embrace Hispanic culture.

"Today, there are 42.7 million Hispanics in the United States," said Barreiro.



(Photo by Chanel S. Weaver, Public Affairs)

Mauricio Barreiro, chairman of the Governor's Commission on Hispanic Affairs, addresses employees during the District's first Hispanic Heritage Month Observance Oct. 11.

"It's important to learn more about Hispanic Americans — the fastest-growing minority group in the United States."

Mallecia Hood, a project manager and biologist in Planning Division, said she enjoyed Barreiro's presentation.

"He taught us to be open-minded and to embrace the diversity that the Hispanic culture brings to the American culture," said Hood.

The Equal Employment Opportunity Office says it will continue to hold similar programs to foster an environment of diversity.

"The more we learn of ethnic differences, the more similarities we observe in each other," said Marie Johnson, equal employment opportunity officer for the District.

Hispanic Heritage Month is celebrated annually from Sept. 15 to Oct. 15.

A proud moment...



(Photo by Joyce M. Conant, Public Affairs)

Deputy District Commander Maj. John H. Osborn was promoted to lieutenant colonel in a ceremony Oct. 12. Among those in attendance were Osborn's proud parents and his three children. Doing the honors are Col. Peter W. Mueller, Baltimore District commander, and Osborn's wife.

Washington Aqueduct (continued from the cover)

How Water is Treated

At the Aqueduct, the process of taking water from raw (untreated material) to a finished, marketable product is a detailed one. The seven steps of treating water at the Aqueduct are: screening, pre-sedimentation, coagulation, flocculation, sedimentation, filtration and disinfection.

The Washington Aqueduct draws all of its raw water from the Potomac at two locations: Great Falls and Little Falls, Md.



William Anderson, senior water treatment plant operator, monitors operations at the control room in the McMillan Treatment Plant. The control room gets updates on the condition of the water every hour.



Lisa Neal, a senior microbiologist, identifies algae cells in water samples from the Potomac River. The Aqueduct opened a brand new laboratory in April that is used to monitor the quality of the water treated there.

As the raw water makes its way from the river to the treatment plants, it passes through a series of screens designed to remove debris such as twigs or leaves.

The next step in the process is pre-sedimentation — which occurs when the water moves slowly through the reservoir and much of the sand and silt settles to the bottom.

Coagulation occurs when aluminum sulfate is added to the water as it flows to sedimentation basins.

The next step in the process is flocculation, which occurs when the water is gently stirred with large paddles to distribute the coagulant; this causes particles to combine and grow large and heavy enough to settle. This process takes approximately 25 minutes.

During sedimentation, the water flows into quiet basins where the flocculated particles settle to the bottom.

During filtration, the water at the top of the basins flows to large gravity filters, where it flows down through filter media consisting of layers of small pieces of hard coal, sand and gravel placed in the bottom of deep, concrete-walled boxes. Filtered water passes through to a collecting system underneath.

The final step in the water treatment process is disinfection, a process where chlorine is added to the water to kill such materials as bacteria or viruses. Ammonia is then added to create chloramine, which is used as the residual disinfectant in the distribution system.

“A lot of harmful materials, such as bacteria and possibly pesticides are in the water that comes from the river,” said Tom Jacobus, chief of the Washington Aqueduct. “The treatment process removes these contaminants.”

Other chemicals like fluoride are added to reduce tooth decay and calcium hydroxide (lime) and orthophosphate are added to reduce

corrosion in the pipes and equipment of the distribution systems as well as consumers’ plumbing. In addition to increasing the longevity of the distribution system, the lime reduces the leaching of substances such as lead from plumbing. Powdered activated carbon is occasionally used for taste and odor control.

After the water has completed its path through the treatment process, it is referred to as finished or potable water. Most people simply call it drinking water.



Donald Rose, an engineering and equipment operator, inspects a device on a 20-ton mobile hydraulic crane. The crane is frequently used to remove debris from the Potomac River.

Monitoring the Operation

Ricky Davie, a supervisor at the Dalecarlia Treatment Plant, said he and his team constantly monitor the treatment process to ensure that things are running smoothly.

“It’s important that we ensure that the correct chemicals get into the water,” said Davie.

The Washington Aqueduct has instituted many controls to ensure it continues to produce quality drinking water. One such resource is its team of fully-certified lab professionals who

constantly monitor the water.

“We analyze samples to demonstrate that the drinking water is clean and safe, and meets all of the standards of the Environmental Protection Agency” said Robert Hoffa, a chemist and chemical hygiene specialist who works at the Aqueduct.

Over the years, the Aqueduct has embarked on major plant and process upgrades to ensure that it will continue to meet its responsibility of providing a safe, reliable and cost-effective product for the residents of the D.C. metropolitan area.

With these important missions, the Aqueduct team constantly meets with their customers to ensure they are responsive to the customers’ concerns.

“We often coordinate with such customers as the Water and Sewer Authority and the local hospitals to ensure that we are meeting their needs,” said Mel Tesema, section chief of the Operations Branch at the Aqueduct.

There are also occasions when a machine breaks down because a part is no longer operational. While most people would call to have their machine serviced, the Aqueduct staff has become quite self-sufficient.

“We make a lot of our own replacement parts,” said Jim Sikorski, a machine shop supervisor at the Aqueduct.

With both a machine shop and a carpentry shop on-site, the maintenance staff of the Aqueduct can make all sorts of things, from the nuts and bolts of a steel part to a wooden door.

In addition to their daily responsibilities, Aqueduct employees also give tours to students of local schools and universities, EPA officials, and other parties who are interested in witnessing the water treatment process firsthand.

There are times when the work is demanding, but the employees at the Aqueduct said they love their jobs.

“Most of the people in our shop have been here for more than 20 years,” said Ray Moton, a water operations supervisor who works at the McMillan Treatment Plant.



Jim Sikorski, a machine shop supervisor, shapes a bolt on the Bridgeport Milling Machine. Often, the staff at the machine shop can make replacement parts when a machine at the Aqueduct breaks down.

Moton says the Aqueduct employees are dedicated because they know they are making a difference.

“We have an important mission of producing high-quality water for the Capital city, and it is a job we take pride in,” said Moton.

Jagdish Tarpara, an environmental engineer, agrees.

Although he enjoys all aspects of his job, he said the people who work there constantly inspire him.

“The people here are nice and easy to work with,” said Tarpara.

For more information on the Washington Aqueduct, visit <http://washingtonaqueduct.nab.usace.army.mil>



(From left to right) Ricky Davie, Robert Barb and Richard Cantilena work at the Operator's Control Desk at the Dalecarlia Treatment Plant. They can monitor the entire treatment process from this location.

Veterans Day:

Preserving our History

By Katisha Draughn
Public Affairs Office

They answered the call to duty for our country.

Nov. 11 is a day of observance to honor our military veterans.

On the 11th hour of the 11th day of the 11th month, the allied powers signed a cease-fire agreement (an armistice) to end World War I in 1918.

A year later, then President Woodrow Wilson proclaimed Nov. 11 Armistice Day, stating that it is a day to recognize the heroism of all servicemembers who died during the war.

In 1954, Armistice Day was renamed to Veterans Day to honor those who served in all of America's wars.

Today, Nov. 11 allows us to honor



veterans who serve during peace and in war.

Presently, there are approximately 25 million veterans who took the oath to defend the United States of America.

With so many District employees seeing firsthand what our service

members go through each day, we can all take a few minutes to think about them and their families and all they are willing to sacrifice for our nation's freedom.

On Veterans Day we thank those who have helped this great nation become what it is today.

Quick Poll: What motivated you to serve in the armed forces?



Humberto Gonzalez
Office of Security and Law Enforcement
Army Veteran

"I wanted to serve the country and see the world."



Craig Benson
Real Estate Division
Army Veteran

"It was a family tradition."



Paul Matthews
Logistics Division
Marine Corps Veteran

"I knew I was going to be drafted, so I went ahead and joined."

Tips for safely warming your home as temperatures begin to drop

By The Safety and Occupational Health Office

As the temperatures begin to drop, some of us will sometimes use portable heating devices to help keep our homes and work places warm. Heating equipment is the leading cause of home fires from November through February, and trails only cooking equipment in home fires year-round.

Space Heaters

If you use wall space heaters or other heating devices at home, you should remember to pull all furniture and other combustible items at least three feet away from any heating devices. Space heaters are temporary heating devices and should only be used for a limited amount of time each day and should never be connected to an outlet with an extension cord. When not in use, be sure to unplug the unit and let it cool down if you will be storing the unit. Young children should be kept away from any appliance that has hot surfaces that can cause burns. The use of space heaters in the City Crescent Building is illegal. Do not use them in your cubicle (you could be held liable if something goes wrong).

Fireplaces

Before using the fireplace for the first time in a season, make sure the flue is open. The flue is a trap door that keeps heat out in the summer and cool air from coming in when the fireplace is not in use. You can check it by looking up the chimney to see if you are able to see daylight. If there are any obstructions, remove them. If not removed, these obstructions will cause carbon monoxide to back up into your home. Carbon monoxide is a deadly, odorless and invisible gas. Artificial logs made from wax and sawdust should be used one at a time. Pressure-treated wood should not be burned in stoves or fireplaces because it contains toxic chemicals that can make you sick. Never leave a fireplace unattended. Chimneys and vents should be inspected and cleaned annually.

Gas or Electric Furnaces

Gas or electric furnaces that have not been used for several months will most likely have a build-up of dust and dirt on heating elements. This can cause a burning smell and even a light haze of white smoke when first operated for the season. This smell and haze are not harmful, and will take only several uses before all the dust and dirt on the heating unit are burnt away. To be safe, try to run the furnace on a warm day while opening all windows so the smell can escape. If the smoke turns black and the furnace starts to rumble, leave the building immediately and call the fire department by dialing 911.

Smoke Alarms and Carbon Monoxide Detectors

Test your home smoke alarms on a regular basis. Do this by pressing the test button on the unit. Some newer models also feature the ability to test the unit with a flashlight as well. If you are not sure that your unit has this feature, check your operations manual or consult the manufacturer.





(Photo by Larry Mathena, Operations Division)

Baltimore District Commander Col. Peter W. Mueller presents the Commander's Award for Public Service to Julie Cook at the Dam Tenders Conference in Binghamton, N.Y., Sept. 14. Julie spent several hours each day preparing food and refreshments for personnel who were working 12-hour shifts during the June flooding event.

FEDERAL EMPLOYEES HEALTH BENEFITS

Open season

November 13, 2006 - December 11, 2006



FEHB OPEN SEASON HEALTH FAIRS

November 15 & 16, 2006

10 a.m. - 2 p.m.

Wednesday, Nov. 15- Fallon Federal Building 1st Floor South Lobby

Thursday, Nov. 16- City Crescent Building EEOC 4th Floor Conference room

Questions- please contact Darlene Greer, HR, 2-2087



U.S. Army Corps of Engineers Baltimore District



Town Hall Meeting

Tuesday, Dec. 12
10 - 11:30 a.m.

Baltimore Convention Center

All employees are encouraged to attend



All Stressed Out...



(Photo by Chanel S. Weaver, Public Affairs)

(From left to right) Resource Management employees Marie Lima, Larry D. Smith, Christina T. Anderson, Carol Bostwick and Valerie Pence, suffer from a case of “end of the fiscal year stress” Sept. 29. Employees across the District worked overtime — even through the night and weekend — to ensure that the District met all of its financial obligations for fiscal year 2006, which ended Sept. 30.

**MARK YOUR
CALENDARS!**

Baltimore District Holiday Party



Speakers Bureau Update

Fontella Moore and **Jodi Beauchamp, PL**, spoke to the Cecil and Harford County chapters of the Maryland Municipal League in Perryville, Md., Oct. 12.

They talked about how Corps programs and resources might benefit residents in the area.



**Dec. 15
Camden Yards
11:30 a.m. - 3:30 p.m.**